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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/744,932	03/26/2001	Dominique Coster	P617710US0	6117

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07/18/2002

Supervisor, Patent Prosecution Services
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EXAMINER

BOLDEN, ELIZABETH A

ART UNIT PAPER NUMBER

1755

DATE MAILED: 07/18/2002

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Please find below and/or attached an Office communication concerning this application or proceeding.

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Office Action Summary	Application No. 09/744,932	Applicant(s) COSTER ET AL.	
	Examiner Elizabeth A. Bolden	Art Unit 1755	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133).
- Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 18 September 2001.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 20-42 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 20-42 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on _____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
- 11) ☐ The proposed drawing correction filed on _____ is: a) ☐ approved b) ☐ disapproved by the Examiner.
If approved, corrected drawings are required in reply to this Office action.
- 12) ☐ The oath or declaration is objected to by the Examiner.

Priority under 35 U.S.C. §§ 119 and 120

- 13) ☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
a) ☒ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. _____.
3. ☒ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
- * See the attached detailed Office action for a list of the certified copies not received.
- 14) ☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. § 119(e) (to a provisional application).
a) ☐ The translation of the foreign language provisional application has been received.
- 15) ☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. §§ 120 and/or 121.

Attachment(s)

- | | |
|--|---|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892) ✓ | 4) <input type="checkbox"/> Interview Summary (PTO-413) Paper No(s). _____ |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | 5) <input type="checkbox"/> Notice of Informal Patent Application (PTO-152) |
| 3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO-1449) Paper No(s) _____ | 6) <input type="checkbox"/> Other: _____ |

DETAILED ACTION

Claim Rejections - 35 USC § 112

The following is a quotation of the second paragraph of 35 U.S.C. 112:

The specification shall conclude with one or more claims particularly pointing out and distinctly claiming the subject matter which the applicant regards as his invention.

Claims 23 and 24 are rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention.

Claims 23 and 24 recite a range for "a light transmission" in the second line of the claim. It is unclear which light transmission is to be limited by this range. For example does the applicant mean TLA4, TLC5, or TLA5?

Claim Rejections - 35 USC § 102

The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

(e) the invention was described in-

(1) an application for patent, published under section 122(b), by another filed in the United States before the invention by the applicant for patent, except that an international application filed under the treaty defined in section 351(a) shall have the effect under this subsection of a national application published under section 122(b) only if the international application designating the United States was published under Article 21(2)(a) of such treaty in the English language; or

(2) a patent granted on an application for patent by another filed in the United States before the invention by the applicant for patent, except that a patent shall not be deemed filed in the United States for the purposes of this subsection based on the filing of an international application filed under the treaty defined in section 351(a).

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Claims 20-38 and 40-41 are rejected under 35 U.S.C. 102(b) as being anticipated by Seto et al. European Patent Application EP 825,156 A1.

Seto et al. disclose a turquoise blue and deep green soda-lime-glass that contains a total iron content of between 1.2 and 2.2 weight % and 0.001 to 0.03 wt % CoO, 0 to 0.0008 wt % Se, and 0-0.2 wt % NiO. See abstract of Seto et al. Seto et al. disclose a FeO/TFe₂O₃ ratio of the glass as being between 10 and 40 weight %. See page 4, lines 9-16. By this limitation Seto et al. would have an FeO content of between 0.12 and 0.88 wt%.

Seto et al. disclose a composition whose ranges are sufficiently specific to anticipate the compositional limitations of claims 20-38 and 40-41. See abstract, page 3, lines 15-19, page 4, lines 44-49, and MPEP 2131.03. Moreover, Examples 3, 7, 12 in Table 1 and Examples 14, and 18-20 in Table 2 anticipate the limitations of claims 20-38 and 40-41.

Seto et al. disclose ranges of properties, which are sufficiently specific to anticipate the optical property limitations of claims 20-38 and 40-41. See page 4, line 55 to page 5, line 9, and page 5, lines 32-35. Moreover, Examples 3, 7, 12, 14, and 18-20 in Tables 1 and 2 anticipate the property limitations 20-27, and 32-34.

Seto et al. fails to disclose the property of instant claim 38. Since applicants' composition is taught by Seto et al., it follows that the property recited in claim 38 would be inherent to the compositions of Seto et al. See MPEP 2112.

Page 6, lines 13-15 discloses that the Seto et al. compositions are used for automotive windows as recited in claims 40-41.

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Claims 20-34, 36, and 38-42 are rejected under 35 U.S.C. 102(e) as being anticipated by Gulotta et al., U.S. Patent 5,393,593.

Gulotta et al. disclose a gray soda-lime-silica glass with a visible light transmission of less than 35% and a total solar energy transmission (TSET) of less than 22 % for a sample thickness of 3.9mm. See abstract of Gulotta et al. The glass contains a total iron content of 1-2.2 weight % and at least 0.2 wt % of FeO. Additional colorants include CoO and Se. See *ibid*.

Gulotta et al. disclose a composition whose ranges are sufficiently specific to anticipate the compositional limitations of claims 20-34, 36, and 38-42. See abstract and MPEP 2131.03.

Moreover, Examples 28 and 29 in Table II meet all of the limitations of claims 20, 21, 23-25, 29, 33, 34, 36, 40, and 41. The values in the Table II are for a sample 3.91mm thick whereas the present claims recite a thickness of 4 mm. For comparison purposes for different thickness samples, the values of the table have been approximated using the formulas disclosed in Pecoraro et al., U.S. Patent 4,792,536. See column 4, lines 14-17 and U.S. Patent 4,792,536. The converted values are shown below.

Ex #	LTA3.9	TSIR3.9	TUV3.9	LTA4	TSIR4	TUV4	TSET4	Selectivity or LTA4/TSET4
28	20.8	6	4.7	20.02	5.59	4.36	11.91	1.68
29	20.8	5.3	4.3	20.02	4.93	3.98	11.54	1.74

Gulotta et al. disclose ranges of properties, which are sufficiently specific to anticipate the optical property limitations of claims 20-34, 36, and 38-42. See abstract of Gulotta et al., column 4, lines 9-20, 25-27, 40-44, column 10, lines 44-59 and MPEP 2131.03.

Gulotta et al. disclose that the compositions are used for automotive glass applications. See column 1, lines 22-26. Gulotta et al. also discloses that the glass sheets can be formed and then deposited with a metal oxide film. See column 1 lines 33-46. This disclosure meets the limitations of claims 39-42.

Claim Rejections - 35 USC § 103

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

Claims 39 and 42 are rejected under 35 U.S.C. 103(a) as being unpatentable over Seto et al., European Patent Publication EP 825,156 A1 in view of Goodman et al., U.S. Patent 5,087,525.

As shown above, the composition of Seto et al. is sufficiently specific to anticipate claims 20-38, 40, and 41 under 35 U.S.C. 102(b).

The reference differs from claim 39 and 42 by not specifically teaching a metal oxide coating or using the glass as a laminated glazing.

Goodman et al. teach coated glasses for vehicles, which consist of a glass substrate, a coating of titanium nitride, a coating of a silicon complex and a coating of a metal oxide. See column 1, lines 55-62.

It would have been obvious to one of ordinary skill in the art at the time the invention was made to have a glass sheet of Seto et al. as suggested by Goodman et al., because the laminated glass window would have improved insulating capabilities and lower visible reflection. See column 2, lines 32-41 of Goodman et al.

Claims 20-36, 38, and 40-42 are rejected under 35 U.S.C. 103(a) as being unpatentable over Shelestak et al., U.S. Patent 6,413,893.

Shelestak et al. disclose a green soda-lime-silica glasses containing iron oxide in a total amount of 0.6 to 4 weight %, 0.13 to 0.9 wt% of FeO, and other colorants such as chromium oxide, selenium, titanium oxide, cobalt oxide, and vanadium oxide. See abstract of Shelestak et al. and column 18 lines 36-49.

Shelestak et al. disclose a composition whose ranges overlap the compositional limitations of claims 20-36, 38, and 40-42. See abstract, column 18 lines 36-49, and column 18, lines 59 -67. Overlapping ranges have been held to establish prima facie obviousness. MPEP 2144.05.

Shelestak et al. fail to disclose the property of instant claim 38. The composition of Shelestak et al. has overlapping ranges of components with the claimed glass; therefore, one of ordinary skill in the art would expect that the glass of Shelestak et al. would have the claimed properties.

Shelestak et al. differs from the present claims by failing to disclose specific examples having a TUV transmission of less than 8 %, as recited in claim 20.

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However, the reference discloses that titanium oxide, vanadium oxide or other materials listed can be added to reduce the ultra violet transmission of the glass. See column 3, lines 36-39 and column 18, lines 41-49 and 59-67. Moreover the reference discloses glasses having a TUV of, for example, 9.99%. See Example 132 in Table 1. For comparison purposes for different thickness samples, the values of the table have been approximated using the formulas disclosed in U.S. Patent 4,792,536. See column 4, lines 14-17 and U.S. Patent 4,792,536. The converted values are shown below.

Ex #	LTA4.06	TSIR4.06	TUV4.06	LTA4	TSIR4	TUV4	TSET4	Selectivity or LTA4/TSET4
132	28.38	8.20	9.99	28.88	8.50	10.32	17.52	1.65
134	29.13	9.34	10.84	29.63	9.66	11.19	18.49	1.60

Therefore, it would have been obvious to one of ordinary skill in the art at the time the invention was made, to have increased the vanadium oxide content of the examples of Shelestak et al. as suggested by Shelestak et al. because the resultant glass would have a decreased TUV

Column 18, lines 31-40 discloses that Shelestak et al. compositions are used for vehicle glazing with sheet thickness of 1.8-5 mm. It further discloses that the glass sheets can be used in multiple plies and laminated together. This meets the limitations of claims 40-42.

Conclusion

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Elizabeth A. Bolden whose telephone number is 703-305-0124. The examiner can normally be reached on 8:30am to 6:00 pm with alternating Fridays off.

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If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Mark Bell can be reached on 703-308-3823. The fax phone numbers for the organization where this application or proceeding is assigned are 703-872-9310 for regular communications and 703-872-9311 for After Final communications.

Any inquiry of a general nature or relating to the status of this application or proceeding should be directed to the receptionist whose telephone number is 703-308-0661.


DAVID SAMPLE
PRIMARY EXAMINER

EAB
July 15, 2002